

## II. CLAIMS

Claims 1-15 (canceled)

16. (Previously Presented) Connector according to claim 33 characterized in that the laser diodes (8) are transferred (45) on the integrated circuit with a space (50) between these diodes equal to a space (21) between optical fiber terminations in the optical port.

17. (Previously Presented) Optoelectronic connector comprising a package, an optical port, an electrical port, an optoelectronic circuit positioned in the package and connected to the two ports, the optoelectronic circuit comprising a bare control and emission detection integrated circuit chip, an internal wall of the package being provided with metallized connections, pads of the integrated circuit being connected directly to the metallized connections, characterized in that it comprises laser diodes, the laser diodes being firstly laid out on a gallium arsenide substrate, then deposited on an intermediate support, this support being turned over in order to transfer the laser diodes on the integrated circuit, this connector constituting a basic unit link, the package being a MID package with connection metallizations deposited in a cavity of the package, contact armorings of the electrical port of the connector being formed by one of these metallizations.

18. (Previously Presented) Connector according to claim 17, characterized in that the MID package is made by means of a method with metallizations in two passes.

19. (Previously Presented) Connector according to claim 17, characterized in that the package is connected to the integrated circuit by BGA connections, wire bonding or anisotropic film technology.

20. (Previously Presented) Connector according to claim 17, characterized in that the shielding of the package is MID shielding.

21. (Previously Presented) Connector according to claim 33, characterized in that the pads (10) of the integrated circuit are connected (12) directly to the metallized connections.

22. (Previously Presented) Connector according to claim 33, characterized in that the laser diodes are GaAs VCSEL diodes.

23. (Previously Presented) Optoelectronic connector comprising a package, an optical port, an electrical port, an optoelectronic circuit positioned in the package and connected to the two ports, the optoelectronic circuit comprising a bare control and emission detection integrated circuit chip, an internal wall of the package being provided with metallized connections, pads of the integrated circuit being connected directly to the metallized connections, characterized in that it comprises laser diodes, the laser diodes being firstly laid out on a gallium arsenide substrate, then deposited on an intermediate support, this support being turned over in order to transfer the laser diodes on the integrated circuit, this connector constituting a basic unit link, the optical port comprising an inclined mirror (19) inclined at about 45 degrees.

24. (Previously Presented) Connector according to claim 33, characterized in that the optical port comprises a part (18) for positioning optical fiber terminations, this part abutting (23) a cant (24) of the integrated circuit.

25. (Previously Presented) Connector according to claim 33, characterized in that the optical port comprises a limited access with two optical channels and in that the electrical port comprises contacts for electrical signals and contacts for a ground signal.

26. (Previously Presented) Connector according to claim 33, characterized in that the package is a module and comprises means (27, 28) to be stacked on another package.

27. (Previously Presented) Connector according to claim 33, characterized in that the pads of the laser diodes are connected by the connection wires directly to pads of the integrated circuit.

28. (Previously Presented) Connector according to claim 33, characterized in that the optoelectronic circuit comprises means to carry out a conversion of the signals available at the optical port into signals available at the electrical port and/or vice versa.

29. (Previously Presented) Method for mounting an optoelectronic connector comprising a package (1), an optical port (2), an electrical port (3), an optoelectronic circuit positioned in this package and connected to these two ports, the optoelectronic circuit comprising a bare control (5-7) and emission detection (8) integrated circuit chip, said integrated

circuit chip comprising laser diodes (8), an internal wall (29) of the package being provided with metallized connections (11), and pads (10) of this integrated circuit being connected (12) directly to the metallized connections, characterized in that it comprises following steps

- laser diodes (8) are laid out on a gallium arsenide substrate (43),
- the laser diodes are deposited on an intermediate support (45),
- this intermediate support is turned over in order to face the integrated circuit, and then
- the laser diodes are transferred on this integrated circuit.

30. (Original) Method according to claim 29, characterized in that the intermediate support is a glass plate, and that

- said glass plate exists from the very time when laser diodes are laid out, and that
- the gallium arsenide substrate is etched in order to present the laser diodes over the glass plate.

31. (Original) Method according to claim 29, characterized in that laser diodes are deposited on the intermediate support with a spacing between each other equal to a space between two optical fibers (17-20) in the connector.

32. (Original) Method according to claim 29, characterized in that transfer of the laser diodes is done by laser insolation of the intermediate support.

33. (Previously Added) Optoelectronic connector comprising a package, an optical port, an electrical port, an optoelectronic

circuit positioned in the package and connected to the two ports, the optoelectronic circuit comprising a bare control and emission detection integrated circuit chip, an internal wall of the package being provided with metallized connections, pads of the integrated circuit being connected directly to the metallized connections, characterized in that the connector comprises laser diodes on the integrated circuit chip, the laser diodes being formed in a predetermined arrangement from a gallium arsenide substrate and deposited on the integrated circuit chip by transfer from an intermediate support that maintains the predetermined arrangement, the connector defining base unit link.